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Completely bounded analogues of the Choquet and Shilov boundaries for operator spaces

Given a unital operator algebra, it is natural to seek the smallest C^* -algebra generated by a completely isometric image of it, by analogy with the classical Shilov boundary of a uniform algebra. In keeping with this analogy, one method for constructing the so-called C^* -envelope is through a non-commutative version of the Choquet boundary. It is known that such a procedure can be also be applied to operator spaces, although in this case the envelope has less structure. In this talk, I will present a certain completely bounded version of the non-commutative Choquet boundary of an operator space that yields the structure of a C^* -algebra for the associated Shilov boundary. I will explain how the resulting C^* -algebras enjoy some of the properties expected of an envelope, but I will also highlight their shortcomings along with some outstanding questions about them. This is joint work with Christopher Ramsey.